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This report as written with conclusions and recommendations contains both the opinions of the consultant as well as the thoughts and opinions of the seminar participants as summarized by the consultant.

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INTRODUCTION

Hay has been produced in the interior of British Columbia for years, and there is a steady increase in the number of growers who are producing quality hay for the marketplace.

Of the hay utilized by the dairy producers and horse owners in the Fraser Valley, a large portion is imported from Washington State. Hay growers in the interior have indicated that they have a problem at times in marketing their product. Hay dealers and brokers in the Fraser Valley tend to purchase a majority of their hay from Washington State for resale in B.C.

The purpose of the seminar was to identify the current problems or constraints with interior B.C. hay producers accessing a larger share of the B.C. hay market and produce recommendations for the industry by involving agribusiness in hay production, transportation and utilization.

NUTRITIONAL VALUE OF HAY

Adequate quality hay supplies are essential to all livestock producers. Sound technical information is available on the nutrient requirements of farm livestock for proper ration formulation.

For purposes of this report, horses require a higher quality feed than cattle as they are monogastric and have a shorter digestive tract. The above statement refers to the digestibility of feed rather than protein or energy levels per se.

The dry matter intake of feed is calculated usually as a percent of body weight for feeding purposes. Dry matter, energy, protein, minerals, texture etc. are all important when considering feeding value of forage.

Poor quality feeds offer lower consumption and digestibility. As forage matures, the percent of indigestible plant material increases (Acid Detergent Fiber). At times the large bales (1 ton) appear not to dry properly through the center with a resulting increase in insoluble nitrogen; as nitrogen is necessary for protein production in the ruminant animal.

As dry matter percent in forage increases there is a lower nutritional cost per tonne. Hay quality usually decreases as yield increases. Differences have been noticed between B.C. (Fraser Valley) and Alberta with respect to the common approach taken towards hay quality by producers.

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The value of hay savers or additives depend upon forage quality. However, there are currently no predictions as to the quality of the various additives, they are not registered in Ottawa, and they are difficult to evaluate. Various hay producers and users have reported favourable results from the use of "hay savers".

From a nutritional point of view the price of hay involves: 1. requirements, 2. hay quality, 3. cost of protein supplements and 4. cost of energy supplements. Items 2. 3. and 4. can fluctuate to dictate market price.

DAIRY INDUSTRY

The hay portion of the dairy cow's ration must be of high quality or consumption is reduced. The average dairy cow consumes approximately 60 lbs. of silage (grass or corn), 10 - 35 lbs. of grain and 6 - 10 lbs. of dry hay per day.

There may not be enough promotion of interior B.C. hay to the dairy producers of the Fraser Valley to adequately describe the improving quantity and quality of available hay. Hay dealers purchasing in Washington frequently call on their current and potential dairy clients in the Fraser Valley, thus establishing and keeping contacts with buyers.

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The new highway to the interior of B.C. may well reduce trucking costs and help give interior hay a boost with regards to marketing. Many dairy producers prefer to purchase hay through dealers as there is a saving whereby the dairyman does not have to make an extended trip to secure and purchase his hay requirements. Also, a poor quality load can be returned and directed to an alternate buyer who can use that particular quality or grade of hay.

HORSE INDUSTRY

The quality of Racing Thoroughbreds has improved to the point where B.C. is competitive in the international market.

Horse breeders, for the most part are faced with a storage problem thus they purchase hay throughout the year. Usually either timothy or alfalfa hay is purchased by this industry.

Consistent quality is a necessity for the horse breeders and most hay is purchased through dealers. Washington hay tends to be very consistant even as the growing season progresses.

The feeding of hay on horse farms by staff dictates that quality hay is important as staff often do not inspect and sort hay for mold etc. as well as could be expected. Cost of hay may not therefore be as important as quality.

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It appears that historical experience evidencing poor quality or inconsistency with interior hay is being reflected in where the horse industry of the Fraser Valley purchases hay today.

HAY PRODUCTION INDUSTRY

Quality hay production depends upon adequate soil preparation, nutrients, water and management. Weed free hay is a must for the marketplace thus applying herbicides for weed control is important.

Swather conditioner size is important for consistent and adequate drying of hay. Rolling or turning hay by gentle means is important in product quality. Walachin area producers allow 72 hours for curing of hay. Hay is frequently baled after a dew at about 25% moisture.

A haysaver has been used by Walachin ranches and applied at the rate of 1.5 lb./ton with a cost of $3.50/ton. They indicate a production loss of less than 1% spoiled bales and a high consumer acceptance.

Hay growers need to produce uniform bales of about 90 pounds.

Constraints to quality hay production in the interior include weather, weeds, field size and shape (more labour) and farm machinery quality.

Commercial type of hay production equipment would be valuable to the industry. Efficiency is becoming a very important factor in economic hay production. Marketing will continue to be a problem until standard parameters are established. It is difficult to break even on hay production, thus quality is essential as farming and irrigation equipment is costly. Site selection and preparation for hay production is most important.

Producers suggest a possible two or three class market system for hay.

HAY DEALERS, BROKERS AND HAULERS

These people note that interior B.C. hay producers have improved the consistency of their product. Dealers must have the support of growers and their marketing interests in order to establish a co-operative working relationship. Purchasers of hay often leave a question in the minds of growers as to what they will pay for hay. Pricing of hay is frequently difficult to establish.

Establishing a consistent adequate supply of quality hay in the interior is a problem for dealers as they can often find enough hay from 1 or 2 days contact in Washington to last for a month of hauling. Usually only #1 hay is purchased and imported from Washington. Colour, texture, coarseness, bleaching, dust, bloom etc. are all important when examining hay for purchase.

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Hay buyers (dealers) should see all hay prior to purchase until a satisfactory relationship has developed with the growers.

Washington roads are easier for trucking than interior B.C. roads. Adequate load weight is also a problem on B.C. highways. Dealers can average 30 ton per load hauling in Washington, but only 23+ ton from the B.C. interior. However, it appears that 30 ton loads have been hauled from the Cache Creek area if hay is picked up immediately following baling. The trucking cost per loaded mile is important, thus bale weight is important; with heavier bales being more economical. Bale size and string tightness are important for hay haulers. Bales should not be longer than 50 inches. A good bale size appears to be a bale of 48" x 18" x 14".

Time and location are factors in contracts, hay movement etc. with respect to the cost of buying and selling hay.

It is the responsibility of the hay loader to ensure consistency in load quality. The bulk density of the load is important. Access of loaders (boom loaders etc.) and trucks to stacks is critical for efficiency. Washington bales are uniform for loading and hauling.

Hay haulers will tow an empty trailer to Washington, immediately pick up a full trailer and leave the empty trailer there (Pin to Pin Hauling) for loading.

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Hay haulers can place 25 - 27 large (1 ton) bales on a load; however, these bales require new handling systems at the user end. Quality is often a problem with these bales as it is difficult to bale at 20% moisture and have the bales dry down to 14%. Many of these bales must be ground prior to feeding. Also the typical B.C. dairy farm of 70 - 125 cows will purchase 1 - 3 loads of hay per year. These farms are not interested, at this time, in changing their handling systems to accommodate one-half of their forage requirements. A few individual farms though, do purchase a majority of their hay requirements.

There may be a market for other types of hay in the Fraser Valley but mixtures tend to lack consistency of quality.

The Washington and Oregon Hay Growers Association are pleased with their hay testing system which involves both quality and pricing factors. Washington has available private scales that are certified, operated by a weighmaster and open 24 hours. B.C. government scales give axle weight and are not legal for trade. Weighmasters will not give out weighslips from government scales.

Dealers estimate that 200,000 ton of forage moves into B.C. from Washington annually, of which 100,000 ton is quality hay. A high volume of straw is imported annually from Washington for industrial use. This amounts to about 20 loads per day of top quality hay being imported into B.C.

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Only 3% of the hay in Washington is stored under cover as their weather is much more conducive than B.C. for quality hay production. More hay needs to be stored under cover in B.C. to maintain quality.

Dealers are willing often to discount prices if hay can be sold and moved immediately.

If B.C. strives to produce quality hay and buyers can take advantage of the monetary exchange rate, hay producers in B.C. should be able to improve their competitive position in the marketplace. Obviously B.C. hay producers must produce an efficient, consistent quality product conditioned and stored properly, in order to compete in the marketplace with respect to both hauling and the feeding of that hay.

OPPORTUNITIES AND RECOMMENDATIONS

There is and will continue to be a challenge for B.C. producers in hay production and marketing as there are changing methods of producing, marketing and transporting hay.

Thus the following recommendations are presented to the industry:

A. Of prime concern the following information must be obtained.

   1. What volume of forage is imported into B.C. from Washington annually, and its classification or type.

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2. How much hay is produced in B.C. for the marketplace.
3. How many people deal with how many producers and feeders of hay.
4. Average quality of B.C. produced hay.
5. Growers and users needs.
6. Lab analysis available (including sample turn-around time).

B. Establish a "Hay Growers Association" in B.C.

C. Recommend Hay Growers Association establish a hay grading and sorting system. i.e. Dairy grade #1
Feeder grade #2
Commercial grade #3

This system could include hay analysis for dry matter, energy, and protein, and also grading on colour, texture, coarseness, bleaching, dust, bloom etc. The grading system should be integrated with an appropriate pricing system.

D. Establish a scaling system.

Preferably platform scales installed that will hold an entire truck, possibly located at a traffic funnel point such as Hope and which could be established with other agricultural products in mind.

- Or, discussion with B.C. government on having their scales available for trade weighing.

E. Review the possibility for a hay market report for B.C.

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F. Review the possibility of establishing a "Hay Exchange", to facilitate marketing of hay efficiently.

G. Study the opportunities and problems with respect to a possible delayed payment plan for purchasers of hay.

There is a market for quality B.C. hay, however, the above factors and suggestions must be considered in order to reduce industry constraints.